CLASSWALLET

ClassWallet helps K-12 schools as they migrate to Amazon Web Services

About ClassWallet

After creating AdoptAClassroom.org, Jamie Rosenberg discovered a unique insight – getting funding to teachers and schools, and tracking it is much harder than it should be. Teachers don't have the time to manage cash, checks, receipts, and forms. School district and school administrators, education foundations, and PTAs spend a ridiculous amount of time reconciling paperwork and receipts even for the smallest of transactions, and stress about the audit each year.

ClassWallet is a platform that configures spending tools best suited for various organizational needs. Their platform provides a time saving solution that assists with reconciling teacher receipts, club expenditures, and more. This all in one solution works with every accounting platform making it the most trusted way to track educational funds.

How is ClassWallet able to expand and grow its education technology business and help K-12 schools? By partnering with CloudHesive to manage and protect their cloud infrastructure.

CloudHesive is recognized as an Amazon Web Services partner with a focus on both commercial and public sector cloud services. They have helped state, local, and Higher Education institutes begin the journey to the cloud while securing their environments. Now more than ever, the education industry is concentrating on Information Technology to innovate their processes. With ClassWallet being in over 2,000 schools and 63,000 classrooms across 15 states, they partnered with CloudHesive to ensure their AWS environment was secure and available.

The Challenge

With cloud security constantly improving and the volume of data growing exponentially, companies of all sizes are increasingly migrating applications and workloads to the cloud. In this case, ClassWallet's platform had already been deployed onto Amazon Web Services, but they were not monitoring the environment to ensure it was secure. They had a limited number of employees who had a strategic approach to focus on their core business and not on cloud solutions. And with AWS, security isn't just about stopping hackers, it's really about making sure systems work as intended and only as intended.

Meanwhile ClassWallet had been growing at a rapid pace and the security and management of their AWS environment had become a top priority. But without the internal recourses for cloud management, security, and DevOps, ClassWallet needed to find the right team to help with AWS. It wasn't long before they were introduced to CloudHesive and started their partnership. But not only did ClassWallet need help with AWS, they also had a need to obtain a PCI and SOC2 Type 2 certification.

Solution

As normal course, CloudHesive took the consultative approach to understanding what the core issues were with ClassWallet's environment and how they could help them. The team began by understanding the business and seeing what the architecture, security, and required controls needed to be. First, CloudHesive assisted with hardening the OS images used when deploying hosts to their environment in order to meet the PCI requirements. These hosts then had all the security controls in place prior to having any code deployed to them. Cloudhesive then improved standardizing the process of re-deploying hosts so that the integrity of the environment is maintained. As for security compliance, CloudHesive configured a solution that gathers docker and instance logs and places them into a centralized location so that in the event they are needed for any security audits, they will be available.

Additionally, CloudHesive setup an Active Directory Domain as a service in AWS and configured each instance to utilize it to authenticate users. This allowed for accountability when reviewing logs to see what changes were made and by whom. By adding a solution to manage Backups of the environment, CloudHesive had fully laid out a Security Control Plane for the environment. Previously, ClassWallet had been deploying their application using docker containers. CloudHesive was able to provide insight into a best practice solution when performing continuous integration and continuous deployments. The strategy included Industry standard best practices when it comes to utilizing a DevOps environment but also keeping in mind the Security Practices already in place to maintain PCI compliance.

Lastly, CloudHesive worked with ClassWallet and their third-party auditors' hand-in-hand to ensure that the environment, CloudHesive's managed services, and the AWS foundation were all built in alignment with ClassWallet's internal security policy as well as the security standards their third-party auditor was measuring them (ClassWallet) against. As part of this, CloudHesive continues to perform periodic vulnerability assessment and rather than providing a canned report to the customer, they make environment specific recommendations for any findings that may come out of that, as well as implement, upon approval, any recommendations applicable to the in-scope environment.

Technologies Leveraged

AWS: VPC, EC2, EBS

Third party applications or solutions used

Trend Micro, Datadog, Sumologic, Tenable

Benefits

With the now secured environment that utilizes continuous integration and continuous delivery for updating and deploying their applications and having centralized logging and authentication, ClassWallet can focus less on their cloud infrastructure and focus more on building their education technology. The day to day operational issues that may arise in their cloud infrastructure is managed through CloudHesives Managed Services which in turn allows ClassWallet more time to focus on Scaling and growing the business. Through processes set in place by CloudHesive for managing the environment it becomes very easy to scale ClassWallets' Educational Technology in the cloud while still maintaining Security controls.